

# **MFRI Resources for Researchers**

## **Deployment and Family Separation: An Annotated Bibliography**

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NOTE: This document represents one section of the full report *Deployment and Family Separation: An Annotated Bibliography*. To review the full document, visit the Military Family Research Institute Web site at [www.mfri.purdue.edu](http://www.mfri.purdue.edu).

Suggested Citation

Swan, R., et al. (2002). *Deployment and Family Separation: An Annotated Bibliography*. West Lafayette, IN: Military Family Research Institute.

## **Deployment and Family Separation: An Annotated Bibliography**

Deployment, and the family separation that accompanies it, are defining experiences of military life. Researchers have studied family separation during deployment in relation to stress, well-being, child behavior problems, declines in marital satisfaction, and attitudes toward reenlistment. When families are unable to successfully adapt to separation, the performance of military members may be undermined. Research also shows that certain individual and environmental characteristics, such as marital stability prior to separation and use of social support, can moderate the relationship between deployment-related stress and well-being.

The Department of Defense invests considerable resources to prepare members and their families for the challenges and changes brought on by family separation. And although there is a vast research literature on family separation, there are few attempts to merge insights from military and civilian research. This annotated bibliography provides researchers and others with information about the methods and findings of existing studies on deployment and temporary family separation.

### **What This Document Contains and How It Was Compiled**

This document contains brief descriptions of 66 studies, most of which were conducted during the past 20 years, on deployment and family separation. We selected these studies using a standardized process. First, we identified a set of civilian and military databases containing research relevant to the topic. The selected databases include:

- Defense Technical Information Center (DTIC)
- Army Research Institute (ARI)
- Office of Navy Research (ONR)
- Air Force Institute of Technology (AFIT)
- PsycINFO
- Sociofile
- Web of Science

Second, after some initial searching in these databases, we identified five categories of outcomes related to deployment and family separation. These categories include:

1. Child outcomes
2. Family adjustment and coping
3. Marital relationship
4. Mental health and well-being
5. Job outcomes

Third, we developed a standard set of search terms to allow for consistent searching between databases. We used these terms to locate all journal articles, reports, and book chapters that pertained to each of the five deployment categories identified above. The standard set of search terms for the deployment-related variables include:

- Deployment
- Family + separation
- Perstempo, tempo
- Separation + parent
- Parent absence
- Father absence
- Military family
- Military lifestyle
- Tanshinfunin (Japanese term for family separation due to employment)

The standard set of search terms for the outcome categories include:

Child outcomes	Family adjustment & coping	Marital relationship	Mental health & well-being	Job outcomes
<ul style="list-style-type: none"> <li>• Mother</li> <li>• Father</li> <li>• Child, children, infant</li> <li>• Parent, parenting</li> </ul>	<ul style="list-style-type: none"> <li>• Family + relationships</li> <li>• Family support</li> <li>• Spouse</li> <li>• Adjustment</li> <li>• Coping</li> </ul>	<ul style="list-style-type: none"> <li>• Marriage</li> <li>• Marital relationship</li> <li>• Spouse</li> </ul>	<ul style="list-style-type: none"> <li>• Stressors</li> <li>• Depression</li> <li>• Emotion</li> <li>• Well-being</li> </ul>	<ul style="list-style-type: none"> <li>• Satisfaction</li> <li>• Retention</li> <li>• Performance</li> <li>• Career</li> <li>• Attitude</li> <li>• Work, job</li> </ul>

Once we identified and obtained the research materials (either the actual report/article or the abstract), we read them for topic relevance. If these materials contained information about other pertinent studies that were not identified in the primary search, we also obtained these secondary-source studies for review.

We chose the most current and relevant studies/reports identified in each of the deployment outcome categories to review in this annotated bibliography. The number of studies reviewed in each category ranges from 8 to 21, resulting in a total of 66 reviews. Thus, this is not an exhaustive review of the literature, but a representation of the type and quality of research previously conducted. It is intended to serve as a useful tool in the development of future studies.

## How to Use the Annotated Bibliography

The bibliography is set up both as an Excel spreadsheet and a text document. In the Excel spreadsheet version, each study appears in a row; specific information about each study appears in the columns. This format allows readers to scan through columns across studies. Studies with particular study features, such as samples of a certain size or measurement of specific constructs, can be identified quickly. In the text document, information is presented separately for each study/report. The column headings from the spreadsheet are labeled on the left, and the corresponding information is presented at the right. This format allows readers to focus on all features of a particular study at a glance.

The following table describes the information provided under each column heading.

COLUMN	DESCRIPTION
Authors Year Title Source	The complete reference of the article or report.
<u>N</u>	The number of participants in the study.
Participants	Characteristics of the participants in the study.
Pre-Deployment	This column is marked when data is collected <i>prior</i> to the member's deployment.
During deployment	This column is marked when data is collected <i>during</i> the member's deployment.
Post-deployment	This column is marked when data is collected <i>after</i> the member has returned home from deployment.
Method	Usually the type of method used for data collection (e.g., questionnaire, interview). Also, the method of sample selection (e.g., random sampling, convenience sample). If reports are literature reviews that do not involve data collection, it will be indicated here.
Retrospective	This column is marked when respondents are asked to recall <i>previous</i> thoughts/feelings/behaviors as part of the data collection.
Concurrent	This column is marked when respondents are asked to describe <i>current</i> thoughts/feelings/behaviors as part of the data collection.
Predictor variable(s)IV construct	The independent, cause, or predictor variable, usually deployment-related.
Predictor measure(s)IV operation	How the predictor variable(s) is/are measured. The specific measure is given when it is available.
Outcome variable(s)DV construct	The dependent, effect, or outcome variable.
Outcome measure(s)DV operation	How the outcome variable(s) is/are measured.
Findings	A brief summary of important study findings.
Notes	This column contains various information, including: the MFRI author's evaluation of the study; links to other studies; and ideas for future studies.

# **DEPLOYMENT AND MARITAL RELATIONSHIPS**

## Deployment and Marital Relationships

Henning, N. L. (1986). Military wives: Stress, strain, and alcohol use. Doctoral thesis, Air Force Institute of Technology, Wright-Anderson Air Force Base, OH. ADA170 853.

<b>N:</b>	> 100
<b>Participants:</b>	> Army wives
<b>Measurement Taken:</b>	NA
<b>Method:</b>	> Questionnaires
<b>Data are:</b>	> Retrospective
<b>IV Construct:</b>	> Stress > Strain
<b>IV Operation:</b>	> Martin's (1983) stress scale: making and keeping friends, husband's safety, housing issues, employment issues, and mobile lifestyle issues
<b>DV Construct:</b>	> Alcohol quantity-frequency > Problem drinking > Life satisfaction
<b>DV Operation:</b>	> Alcohol quantity-frequency index > Shortened version of the Michigan Alcoholism screening test > The Walter Reed life satisfaction scale
<b>Findings:</b>	> Military wives separated from spouse: 35 wives had experienced at least one problem associated with drinking . Only nine of the drinkers experienced more than two problems associated with alcohol during the specific time frame.  > Strain was significantly and positively related to the quantity-frequency of problems associated with drinking. A negative relationship was found between life satisfaction and problem drinking behaviors.
<b>Notes:</b>	> Poor study design.  > No causal relationships established.  > Small sample of population.
<b>Other Topics:</b>	> Mental health > Family adjustment

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## Deployment and Marital Relationships

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McCarroll, J. E., Ursano, R. J., Liu, X., Thayer, L. E., Newby, J. H., Norwood, A. E., & Fullerton, C. S. (2000). Deployment and the probability of spousal aggression by U.S. Army soldiers. Military Medicine, 165, 41-44.

<b>N:</b>	> 26,835
<b>Participants:</b>	> Dual-military Army couples, not matched
<b>Measurement Taken:</b>	> Post-deployment
<b>Method:</b>	> Questionnaires
<b>Data are:</b>	> Concurrent
<b>IV Construct:</b>	> Deployment
<b>IV Operation:</b>	> Length of deployment
<b>DV Construct:</b>	> Spousal aggression
<b>DV Operation:</b>	> Conflict Tactics Scale
<b>Findings:</b>	<p>&gt; Deployment had a significant effect on self-reported severe spousal aggression by active duty Army men and women. The probability of severe aggression increased with the length of deployment.</p> <p>&gt; The Army rate for severe aggression was higher (2.5%) than the civilian rate (.05%).</p>
<b>Notes:</b>	> The study controlled the length of the deployment to one year, age, race, sex, and number of children living with the respondent.

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## Deployment and Marital Relationships

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Nelson, L. S., Marlowe, J., & Grandin, D. (1987). Coping with separation: An analysis of outcomes and strategies used by working and nonworking wives during routine deployment. Part A. ADA211052.

<b>N:</b>	> 70
<b>Participants:</b>	> Navy wives
<b>Measurement Taken:</b>	> Pre-deployment > During deployment
<b>Method:</b>	> Questionnaires
<b>Data are:</b>	> Retrospective > Concurrent
<b>IV Construct:</b>	> Coping with deployment
<b>IV Operation:</b>	> McCubbin and et al. - Family coping inventory
<b>DV Construct:</b>	> Dysphoria > Depression > Marital happiness > Health > Overall satisfaction
<b>DV Operation:</b>	> Pearlin and Schooler (1978) Dysphoria scale > Center for Epidemiologic Studies Depression Scale > Jacobson's (1980) Marital happiness scale > Original health items > Original scale of overall satisfaction
<b>Findings:</b>	> Working and non-working wives do not differ on stress or satisfaction when their husbands were deployed.  > Non-working wives evaluate the family coping inventory strategies to be more helpful in coping with separation than working wives.  > Working wives who value efforts to develop interpersonal relationships and social support indicated that they were significantly less satisfied with overall Navy life.
<b>Notes:</b>	> Study had small sample size. > The study did not control for time in military and years married.
<b>Other Topics:</b>	> Mental health

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## Deployment and Marital Relationships

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Nice, D. S. (1981). A longitudinal analysis of Navy family separation. Navy Personnel Research and Development Center, San Diego, CA. ADA108381.

<b>N:</b>	> 65 wives of enlisted Navy personnel
<b>Participants:</b>	> 40 Wives of enlisted men preparing to deploy > 25 Wives of personnel aboard a ship remaining in port
<b>Measurement Taken:</b>	> Pre-deployment > During deployment > Post-deployment
<b>Method:</b>	> Home interviews
<b>Data are:</b>	> Concurrent
<b>IV Construct:</b>	> Deployment
<b>IV Operation:</b>	> Time in deployment cycle
<b>DV Construct:</b>	> Marital adjustment > Depressive affect > Stress > Self-esteem > Loneliness > Health opinions > Attitudes toward the Navy > Physical symptoms
<b>DV Operation:</b>	> Modd Questionnaire > Dyadic Adjustment > Pearlin & Schooler's (1978) Stress Scale > Rosenberg's (1965) Self-Esteem Scale > Loneliness Scale > Health Opinion Survey > Grace, G.L., Holoter, H.A., & Soderquist, M.I. (1976) Scale of Attitudes toward the Navy > Physical Symptoms checklist from the Stress Factors Department of the Naval Health Research Center
<b>Findings:</b>	> Navy family separation had no significant effect on measures of self-esteem, loneliness, health opinions, marital adjustments, physical symptoms, and stress for separated and non-separated wives.  > Family separation had no significant effect on the marital adjustment or stress levels of husbands or wives.

	<p>&gt; A substantial proportion of separated Navy wives believed the separation was more difficult than expected in areas such as spousal relations, parenting, finances, affective problems, and health.</p> <p>&gt; The variables that significantly contributed to re-enlistment of the husband were: 1) wife's attitude toward her husband enlistment, husband's attitude toward the Navy, and level of family stress perceived by husband.</p>
<b>Notes:</b>	<p>&gt; Small sample.</p> <p>&gt; Background information of the subjects is not included (SES, race, length of marriage, etc.).</p>
<b>Other Topics:</b>	<p>&gt; Job outcomes</p>

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## Deployment and Marital Relationships

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Raschmann, J. K., Patterson, J. C., & Schofield, G. L. (1989). A retrospective study of marital discord in pilots: The USAFSAM experience. School of Aerospace Medicine, Brooks Air Force Base, TX. ADA219695.

<b>N:</b>	> 17
<b>Participants:</b>	> Male pilots with marital problems
<b>Measurement Taken:</b>	> Post-deployment
<b>Method:</b>	> Items from the United States Air Force School of Aerospace Medicine database
<b>Data are:</b>	> Retrospective
<b>IV Construct:</b>	> Marital discord
<b>IV Operation:</b>	> Original items to test marital discord
<b>DV Construct:</b>	> Pilot performance
<b>DV Operation:</b>	> Original items to test pilot performance
<b>Findings:</b>	> The most common marital discord complaint was communication problems > The second most common marital conflict was occupation (separations and deployments)
<b>Notes:</b>	> Very small sample > The report did not explain the research process very well
<b>Other Topics:</b>	> Job outcomes

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## Deployment and Marital Relationships

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**Rosen, L. N., Durand, D., Westhuis, D. J., & Teitelbaum, J. M. (1995). Marital adjustment of Army spouses one year after Operation Desert Storm. *Journal of Applied Social Psychology*, 25, 677-692.**

<b>N:</b>	<ul style="list-style-type: none"> <li>&gt; 1,274 predeployment</li> <li>&gt; 776 postdeployment</li> <li>&gt; 5 army posts</li> </ul>
<b>Participants:</b>	> Army spouses separated into junior enlisted and non-commissioned officers ODS
<b>Measurement Taken:</b>	<ul style="list-style-type: none"> <li>&gt; During deployment</li> <li>&gt; Post-deployment</li> </ul>
<b>Method:</b>	<ul style="list-style-type: none"> <li>&gt; Questionnaires</li> <li>&gt; Focus groups to form measures</li> </ul>
<b>Data are:</b>	<ul style="list-style-type: none"> <li>&gt; Retrospective</li> <li>&gt; Concurrent</li> </ul>
<b>IV Construct:</b>	> Wanted to see what things were related to marital adjustment during reunion
<b>IV Operation:</b>	<ul style="list-style-type: none"> <li>&gt; Hopkins Symptom Checklist for emotional well-being</li> <li>&gt; Role satisfaction</li> <li>&gt; Increased visits to counselors</li> <li>&gt; Increased visits to health care providers</li> <li>&gt; Coping with daily tasks</li> <li>&gt; Coping with a job if employed</li> <li>&gt; Marital problems: Consideration of divorce and retrospective assessment of how marriage was going prior to ODS</li> <li>&gt; Emotional stressors</li> <li>&gt; Deployment-related events checklist</li> <li>&gt; Life events checklist</li> <li>&gt; Overall support</li> <li>&gt; Resources provided by Army for family support</li> <li>&gt; Informal sources of support</li> </ul>
<b>DV Construct:</b>	> Marital adjustment
<b>DV Operation:</b>	> 19-item checklist of reunion events
<b>Findings:</b>	<ul style="list-style-type: none"> <li>&gt; The factor analysis of the 19 reunion events produced five factors:               <ol style="list-style-type: none"> <li>(1) Distance</li> <li>(2) Closeness</li> <li>(3) Role sharing</li> <li>(4) Independent Spouse</li> <li>(5) Dependent Spouse/Withdrawn Soldier.</li> </ol> </li> <li>&gt; Predictors of factor scores included stress, prior marital problems, social</li> </ul>

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	support, and emotional well-being.  >Most spouses adjusted well to the deployment.
<b>Notes:</b>	> Adjustment patterns discussed in terms of attachment theory and other literature on war-induced separation.
<b>Other Topics:</b>	> Mental health.

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## Deployment and Marital Relationships

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Schumm, W. R., Bell, D. B., & Gade, P. A. (2000). Effects of a military overseas peacekeeping deployment on marital quality, satisfaction, and stability. Psychological Reports, 87, 815-821.

<b>N:</b>	> 113
<b>Participants:</b>	> Army members married at start of deployment
<b>Measurement Taken:</b>	> Pre-deployment > During deployment > Post-deployment
<b>Method:</b>	> Telephone surveys
<b>Data are:</b>	> Concurrent
<b>IV Construct:</b>	> Deployment
<b>IV Operation:</b>	> Length of deployment
<b>DV Construct:</b>	> Marital quality > Marital satisfaction > Marital stability
<b>DV Operation:</b>	> Marital quality was measured using four original items > One original item was used to test marital satisfaction > Marital stability was assessed by repeated measures of analysis of variance (SPSS reliability routine)
<b>Findings:</b>	> Those who remain married, their scores on marital satisfaction and marital quality do not change permanently as a result of oversea deployments. There was a decline in marital satisfaction during the pre-deployment and deployment phases relative to before joining the peacekeeping force and after returning to other duties or civilian life.  > Marital instability was not uncommon among the deployed soldiers over a two-year period, but it was highest for those who said their marriages were in trouble a few months prior to the deployment.
<b>Notes:</b>	> In non-peer reviewed journal > Very short

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## Deployment and Marital Relationships

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Schumm, W. R., Hemesath, K., Bell, D. B., Palmer-Johnson, C. E., & Elig, T. (1996). Did Desert Storm reduce marital satisfaction among Army enlisted personnel? Psychological Reports, 78, 1241-1242.

<b>N:</b>	> 806
<b>Participants:</b>	> Enlisted, married soldiers who served before and after Desert Storm
<b>Measurement Taken:</b>	> During deployment
<b>Method:</b>	> Questionnaire
<b>Data are:</b>	> Concurrent
<b>IV Construct:</b>	> Military service during Desert Storm
<b>IV Operation:</b>	> Serving in military (active duty) before and after Desert Storm
<b>DV Construct:</b>	> Marital satisfaction
<b>DV Operation:</b>	> Marital satisfaction scale
<b>Findings:</b>	> Overall there was no significant change to marital satisfaction.
<b>Notes:</b>	> Article is very short > The results are only for active-duty personnel > Further research must be done for reservists who were deployed during Desert Storm



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## Deployment and Marital Relationships

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Schumm, W. R., Bell, D. B., Knott, B. & Rice, R. E. (1996). The perceived effect of stressors on marital satisfaction among civilian wives of enlisted soldiers deployed to Somalia for operation restore hope. Military Medicine, 161, 601-606.

<b>N:</b>	> 478
<b>Participants:</b>	> Civilian wives of military husbands who were enlisted and deployed to Somalia for Operation Restore Hope
<b>Measurement Taken:</b>	> Pre-deployment > Post-deployment
<b>Method:</b>	> Questionnaire
<b>Data are:</b>	> Retrospective > Concurrent
<b>IV Construct:</b>	> Life stressors and deployment
<b>IV Operation:</b>	> Life stress checklist > General questionnaire
<b>DV Construct:</b>	> Marital satisfaction
<b>DV Operation:</b>	> Marital satisfaction scale
<b>Findings:</b>	> The relationship was only present when stability of the couple was not controlled.  > Being stressed during a husband's absence was not necessarily enough of a problem to detract from the wives' marital satisfaction.
<b>Notes:</b>	> Scales were very small (three item scale for marital satisfaction).
<b>Other Topics:</b>	> Mental health